

Date: Friday, 4/20/2007 2:06:38 PM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : FLOAT SKIDTUBE HIGH GEAR 206 A/B - UNDER REVIEW
Job Number : 31961A	
Estimate Number : 10803	
P.O. Number : N/A	Part Number : D206642641
This Issue : 4/20/2007 S.O. No. : N/A	Drawing Number : D3288 REV C
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : LANDING GEAR	Drawing Revision : C
Previous Run : 31404A	Material : N/A
Written By : <u>AK 07.04.23</u>	Due Date : 5/10/2007 Qty: 1 Um: Each
Checked & Approved By : <u>AK 07.04.23</u>	
Comment : Est Rev:B 05.11.15 Added washers for aft cap, wearshoes and ring EC	
Est Rev:C 06-05-31 Revised steps JLM	
Est Rev:D 07-02-22 Added SS Wearplates & Gaskets JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-641 CHG002

N/A

2.0	D2620	Bent 206 Skidtube
-----	-------	-------------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
-----	-------------	-------------	-------

1	D2620	3" OD Bent Tube	B31487
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Pr 07-04-24 ①

3.0	D2647	Cap
-----	-------	-----



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
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1	D2647	Fwd Cap	B29328
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BE 07-04-24 ①

4.0	D32861	Doubler
-----	--------	---------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
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2	D3286-1	Doubler	B29090
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Pr 07-04-30 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Seq. #:

Machine Or Operation:

Description:

5.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

- 1-Deburr FWD edge of tube, grind bending marks. *Pm 07-04-240*
- 2-Remove ridge on inside of fwd edge of tube as per Dwg D3288. *Pm 07-04-240*
- 3-Weld Fwd Cap as per Dwg D3288, Grind to obtain proper fit
A/R AL ROD Batch: *M102421 BE 07-04-240*
- 4-Grind welds flush to cap on top surface only. *BE 07-04-24 ①*
- 5-Cut Aft end as per Dwg D3288 from front of tube then deburr *Pm 07-04-300 ①*
- 6-Remove inner indexing ridge on aft end as per Dwg d3288 *Pm 07-04-300 ①*
- 7-Open holes for aft cap as per Dwg D3288 using Dt8025 *Pm 07-04-300 ①*
- 8-Drill pilot holes using DT8818 *Pm 07-04-300 ①*
- 9-Insert D3286-1 doubler using DT8732 & DT8879, then locating doubler off the 3/16" holes cleco *Pm 07-04-300 ①*
D3286-1 doubler, leave Dt8732 for added support
- 10-Drill D3286-1 doubler rivet holes in tube using #40 drill, spot drilling doubler at the same time. *Pm 07-04-300 ①*
- 11-Working from center out, drill #30 holes into D3286-1 Doubler. cleco each hole after its drilled, Verify *Pm 07-04-300 ①*
angle of holes to accomodate rivet heads.
- 12-Remove 3/16" clecos only and open GHW holes to .500" as per Dwg D3288. *Pm 07-04-300 ①*
- 13-Remove D3286-1 doubler, identify orientation, deburr then attach to W/O *Pm 07-04-300 ①*
- 14-Remove indexing edge as per Dwg D3288. *Pm 07-04-300 ①*
- 15-C'sink rivet holes as per Dwg D3288. *Pm 07-04-300 ①*

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

DP 7-4-30

W/O:		WORK ORDER CHANGES					
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Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description :

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



pm 07-04-30



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

BE 07-04-30

9.0

CR3212404

Cherry Rivet



Comment: Qty.: 52.0000 Each(s)/Unit Total : 52.0000 Each(s)

Pick:

Qty Part Number Description Batch

52 CR3212-4-04 Rivet

M101334 pm 07-04-30

10.0

D3289041

Float Web (206A/B)



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3289-041 Float Web

D24864 pm 07-04-30

11.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

Full 07-04-30 - Open GHW holes to ϕ .0625 AS per DWG D3288 & deburr

1-Locate, install and rivet doublers as per Dwg D3288. Micro-shave rivets as required. *pm 07-04-30*

- Debur blow out chips pm 07-04-30

2-Bond web in place as per Dwg D3288 & QSI 015.

A/R Sikaflex-291

M103561

Sikaflex expire date:

07-10-01

Start: *07-04-30*

Time: *4:15pm*

Finish: *07-5-1*

Time: *10:30am*

(Adhere for 12 hours)

pm 07-04-30

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

DP 7-5-2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number: 31961A

Part Number: D206642641

Job Number:



Seq. #:	Machine Or Operation:	Description :
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13.0	BENDING	BENDING MACHINE
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Comment: BENDING MACHINE

Bend tube using program D3288 as per Dwg D3288. Install drop pins in cross bolt spacer holes to maintain web position.

EL 7-5-2

14.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
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Comment: LANDING GEAR RESOURCE 1

1-Drill pilot holes for wearplates using D3288-T2 as per Dwg D3288, then open to Ø0.297". (without cutting fluid)

DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES)

~~2-Open X-BOLT holes as per Dwg D3288.~~

N/A

3-C'sink X-bolt holes.

4-Debur

BE 07-05-01

15.0	D2649	Crossbolt Spacer
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Comment: Qty.: 9.0000 Each(s)/Unit Total : 9.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
-----	-------------	-------------	-------

9	D2649	Crossbolt spacer	
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B 31112

BE 07-05-01

16.0	D32751	Crossbolt Spacer
------	--------	------------------



Comment: Qty.: 9.0000 Each(s)/Unit Total : 9.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
-----	-------------	-------------	-------

9	D3275-1	Crossbolt spacer	
---	---------	------------------	--

B 21748

BE 07-05-01

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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QA: N/C Closed: _____ Date: _____

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Job Number: 31961A

Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description:

17.0

D32863

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3286-3

Spacer

B29401 BE 07-05-01

18.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3288. Remember to back drill each hole before welding the other side. Use aluminum rod.

A/R Aluminum Rod *M102421 BE 07-05-01*

2-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D3288. Remember to back drill each hole to Ø.402" before welding other side. Use SS rod as required

A/RSS Rod *NONE BE 07-05-01*

3-Grind welds flush to Fwd cap on top surface only. *Pr 07-05-01 ①*

4-Grind cross bolt welds flush as per Dwg D3288. Masking Tape access to inside of the skidtube *Pr 07-05-01 ①*

5-Counterbore 5/16" x 0.750" deep using DT8747, except 8th cross bolt hole from Aft end, as per Dwg D3288. *Pr 07-05-02 ①*

19.0

QC5 / QC9

INSPECT WORK TO CURRENT STEP



(PTO)

Comment: INSPECT WORK TO CURRENT STEP

QC5 -> 07-05-01 ①

QC9 -> 07/05/03

20.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

AS 07-05-03 ①

21.0

QC3

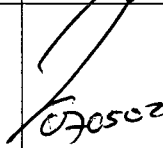
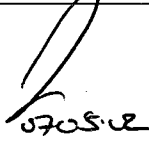
INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FL

07/05/04 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
20502	19.0	Add QCA to work order before QCS Please Perm Change				 20502	 20502

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Job Number: 31961A

Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description:

22.0

D3415041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3415-041

Nut Plate

B21251 B30837

(PTO)

23.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

2 CCR264SS33

Rivet

m14651

m103525
m17592

24.0

CR3212403

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

2 CR3212-4-03

Rivet

m15918

25.0

ALS71032130

Insert



Comment: Qty.: 64.0000 Each(s)/Unit Total: 64.0000 Each(s)

Insert

Batch:

m102475

FL

07/05/04

26.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install D3415-041 Nut Plate as per Dwg D3288, Install with LPS-3

A/R LPS-3

Batch:

m104161

2-Install inserts Dwg D3288. Use a drop of Sikaflex inside insert holes

A/R Sikaflex-291

Sikaflex expire date:

m103561
07/10

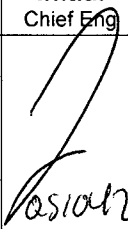

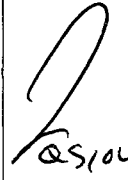

FL

07/05/04

0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/05/09
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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070507	220 23-0	The nut plate came loose, when the warhead WAS hammered on to fit the tube better.		Replace nut plate, and change the CCR 264333-3 rivet for A-4, for better grip on this tube.	Pm- 07-05-07			

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Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description :

27.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP
Inserts & Nut plate

Jason

28.0

D353515

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
WEARSHOE
Batch: B31990

29.0

D353521

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
WEARSHOE
Batch: B31991

30.0

D353535

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
WEARSHOE
Batch: B31992

31.0

D353541

WEARSHOE



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
WEARSHOE
Batch: B31993

32.0

D353615

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
GASKET
Batch: B31994

33.0

D353621

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
GASKET
B31995

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Part Number: D206642641

Job Number:



Seq. #:

Machine Or Operation:

Description :

34.0

D353635

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch:

B31996

35.0

D353641

GASKET



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch:

B31997

36.0

D35371

WEARPAD



Comment: Qty.: 7.0000 Each(s)/Unit Total : 7.0000 Each(s)

WEARPAD

Batch:

B31998

37.0

D35373

WEARPAD



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARPAD

Batch:

B31726

38.0

AN3C4A

BOLT



Comment: Qty.: 66.0000 Each(s)/Unit Total : 66.0000 Each(s)

BOLT

Batch:

M103585

39.0

NAS1515H3L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 NAS1515H3L Washer

M103641

40.0

AN960C10L

washer



Comment: Qty.: 64.0000 Each(s)/Unit Total : 64.0000 Each(s)

Pick:

Qty Part Number Description Batch

FK 07/05/04 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Seq. #:

Machine Or Operation:

Description :

64 AN960C10L

Washer

m104215

41.0

D34131

Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3413-1 Ring

B24869

42.0

AN4C5A

BOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 AN4C5A Bolt

m18918

43.0

AN960JD416

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 AN960JD416

Washer *m10335T*

44.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2646 Aft Cap

B30119

Feb 07/05/04 0

45.0

AN960C10L

washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 AN960C10L

Washer *m104215*

✓

W/O:		WORK ORDER CHANGES					
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46.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

2-Install wearshoes/wearpads & Gaskets as per Dwg D3288.

3-Install Ring on Nut Plate as per detail F & Dwg D3288.

4-Spray inside tube with LPS-3 on both sides of web

5-Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R Sikaflex-291

Sikaflex expire date:

M103561
07-10

6-Coat all exposed fastners with LPS Procyon, remove any excess on powder coat with MEK Degreasser.

A/R LPS Procyon Batch:

M17168

M-d
07/05/05

47.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

207-05-07

48.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-642-641

Location:

PPP Rev:

PPP B 31964 Rev 7/5/80

49.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

207-05-07

Job Completion



207-05-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
07-05-07	47.0	Apply a small bead of Sikaflex around the ground handling locations on this w/o only. Awaiting a permanent change. <i>J</i> Batch m 103561 exp. 07/10	<i>SD</i>	07/05/07		<i>PH</i> 07.04.07	<i>J</i> 070507

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ _____ Date: 07/05/07
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NOTE: Date & initial all entries



DESIGN CP	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3288	REV. C SHEET 1 OF 3
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY SCALE NTS	
A	04.05.17	NEW ISSUE	
B	05.03.16	CHANGE INSERTS	
C	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

RELEASED

07.02.12 [Signature]

Qty -041	Part Number	Description
X	D3288-041	SKIDTUBE ASSEMBLY
1	D2600-1-240	EXTRUSION
1	D2647	CAP
1	D2646	AFT CAP
9	D2649	CROSS BOLT SPACER
9	D3275-1	CROSS BOLT SPACER
2	D3286-1	DOUBLER
2	D3286-3	SPACER
1	D3289-041	FLOAT WEB
1	D3413-1	RING
1	D3415-041	NUT PLATE
1	D3535-15	WEARSHOE
1	D3535-21	WEARSHOE
1	D3535-35	WEARSHOE
1	D3535-41	WEARSHOE
1	D3536-15	GASKET
1	D3536-21	GASKET
1	D3536-35	GASKET
1	D3536-41	GASKET
7	D3537-1	WEARPAD
1	D3537-3	WEARPAD
64	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
66	AN3C4A	BOLT
1	AN4C5A	BOLT
1	AN960C416	WASHER
66	AN960C10L	WASHER
2	CCR264SS3-3	RIVET
2	CR3212-4-03	RIVET
52	CR3212-4-04	RIVET
2	NAS1515H3L	WASHER

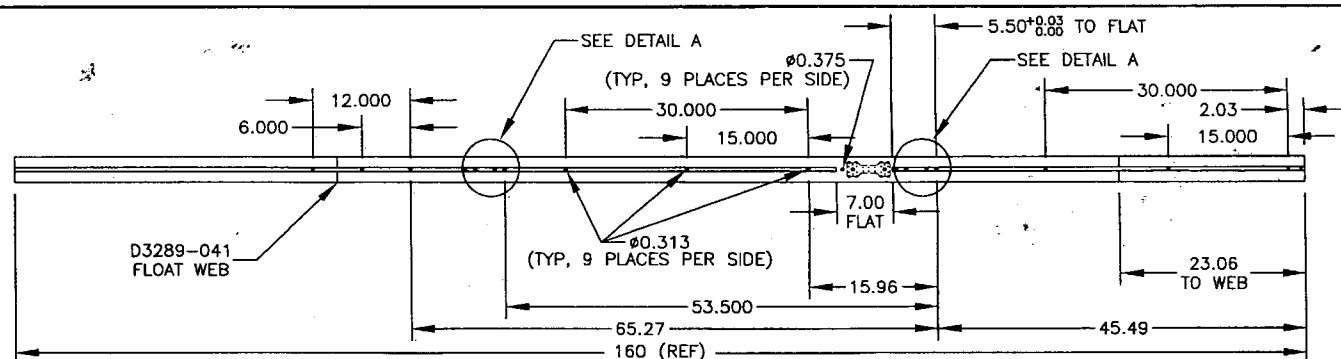
GENERAL NOTES:

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3289-041 FLOAT WEB INTO D3288-1 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX -241/291. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH:
 - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
 - POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3288-1T2 BEFORE FINISH. INSTALL 130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

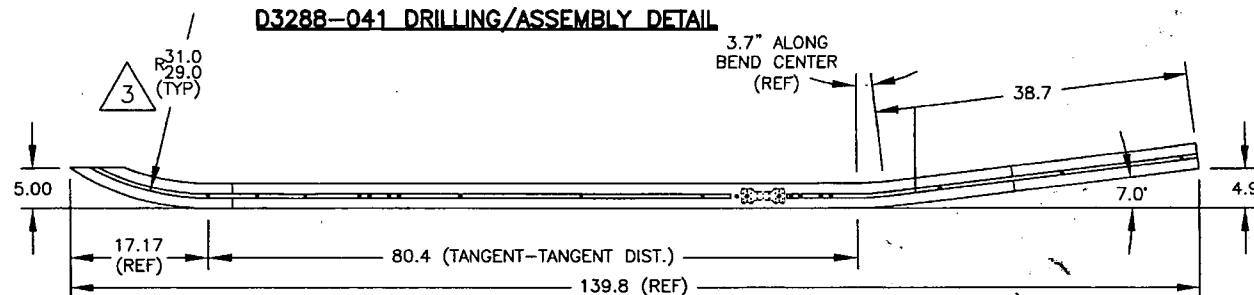
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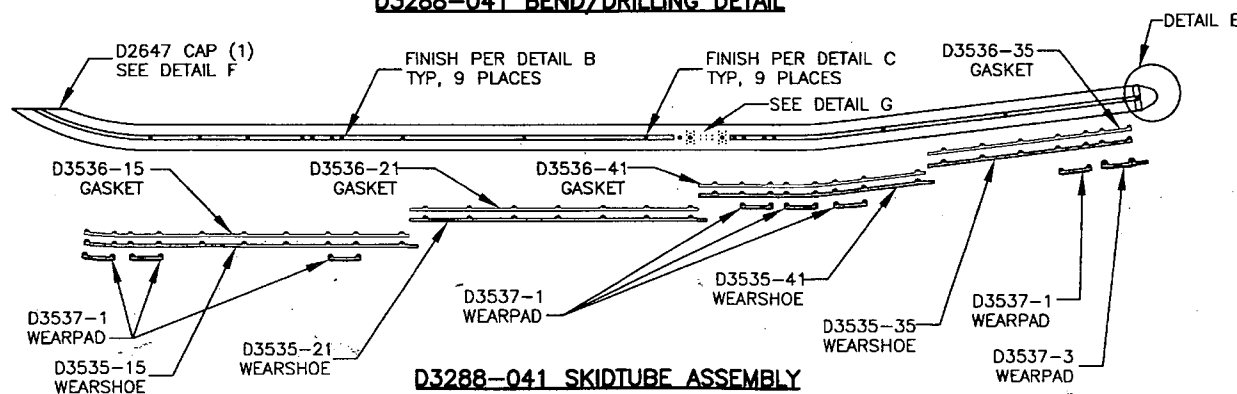
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D3288-041 DRILLING/ASSEMBLY DETAIL



D3288-041 BEND/DRILLING DETAIL



D3288-041 SKIDTUBE ASSEMBLY

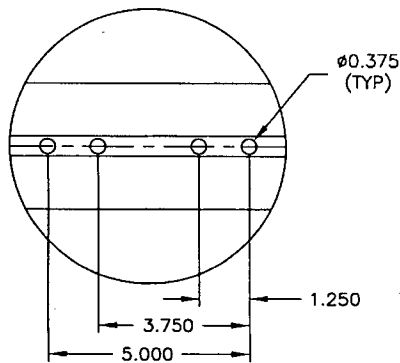
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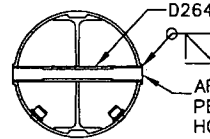
07.02.12

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DATE		06.12.19		DRAWING NO.		REV. C
				D3288		SHEET 2 OF 3
				TITLE		SCALE
				SKIDTUBE ASSEMBLY		1:15

DETAIL A: DRILL DETAIL

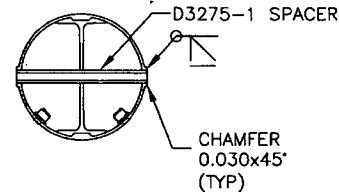


DETAIL B FOR 0.375 HOLES ONLY



- AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR 0.375
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE TO 0.313x0.75 DEEP

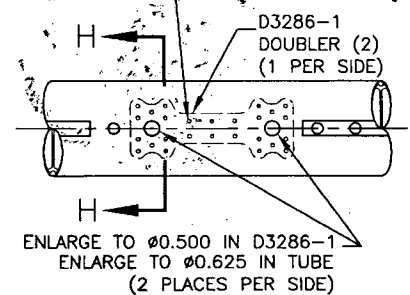
DETAIL C FOR 0.313 HOLES ONLY



CHAMFER
0.030x45°
(TYP)

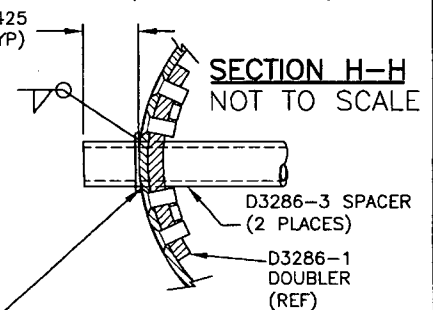
DETAIL G SCALE 1:5

DRILL #30
C'SINK 0.229x100°
INSTALL CR3212-4-04
RIVET (26 PER DOUBLER)



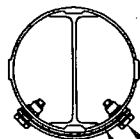
ENLARGE TO 0.500 IN D3286-1
ENLARGE TO 0.625 IN TUBE
(2 PLACES PER SIDE)

SECTION H-H NOT TO SCALE



- TO INSTALL D3286-1/-3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH ROUND TUBE
 2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
 3. ENLARGE HOLES IN D3286-1 TO 0.500
 4. ENLARGE HOLES IN TUBE TO 0.625
 5. RIVET D3286-1 TO TUBE
 6. INSERT D3286-3 SPACER
 7. WELD IN PLACE AND GRIND FLUSH

DETAIL D



- ALS7-1032-130 INSERT (1)
AN3C4A BOLT (1)
AN960C10L WASHER (1)
(64 PLACES)
GASKET/WEARSHOE/WEARPAD (REF)

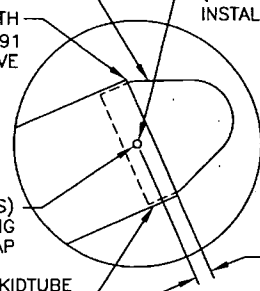
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DETAIL E

- AN3C4A BOLT (1)
AN960C10L WASHER (1)
NAS1515H3L WASHER (1)
(2 PLACES)
INSTALL WITH SIKAFLEX-241/-291

D2646 CAP
SEAL WITH
SIKAFLEX-241/291
ADHESIVE



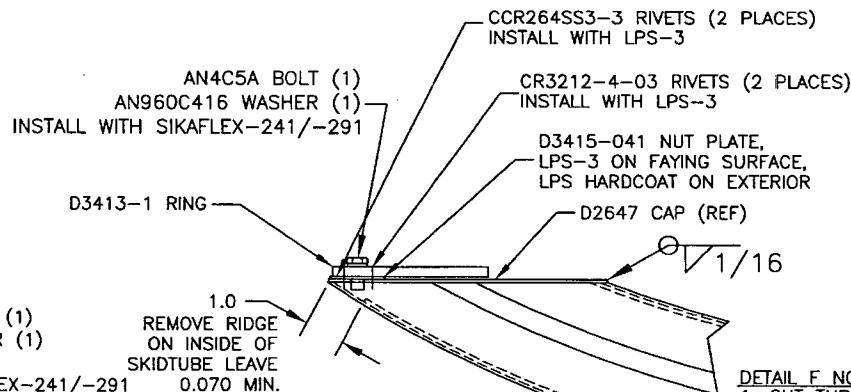
0.208 (2 PLACES)
DRILL PRIOR TO INSTALLING
D2646 CAP

BORE OUT END OF SKIDTUBE
TO 0.75 DEPTH AND 0.070 WALL

0.400

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DETAIL F: END FINISHING DETAIL



ORIENTATION
OF D3415-041

DETAIL F NOTES

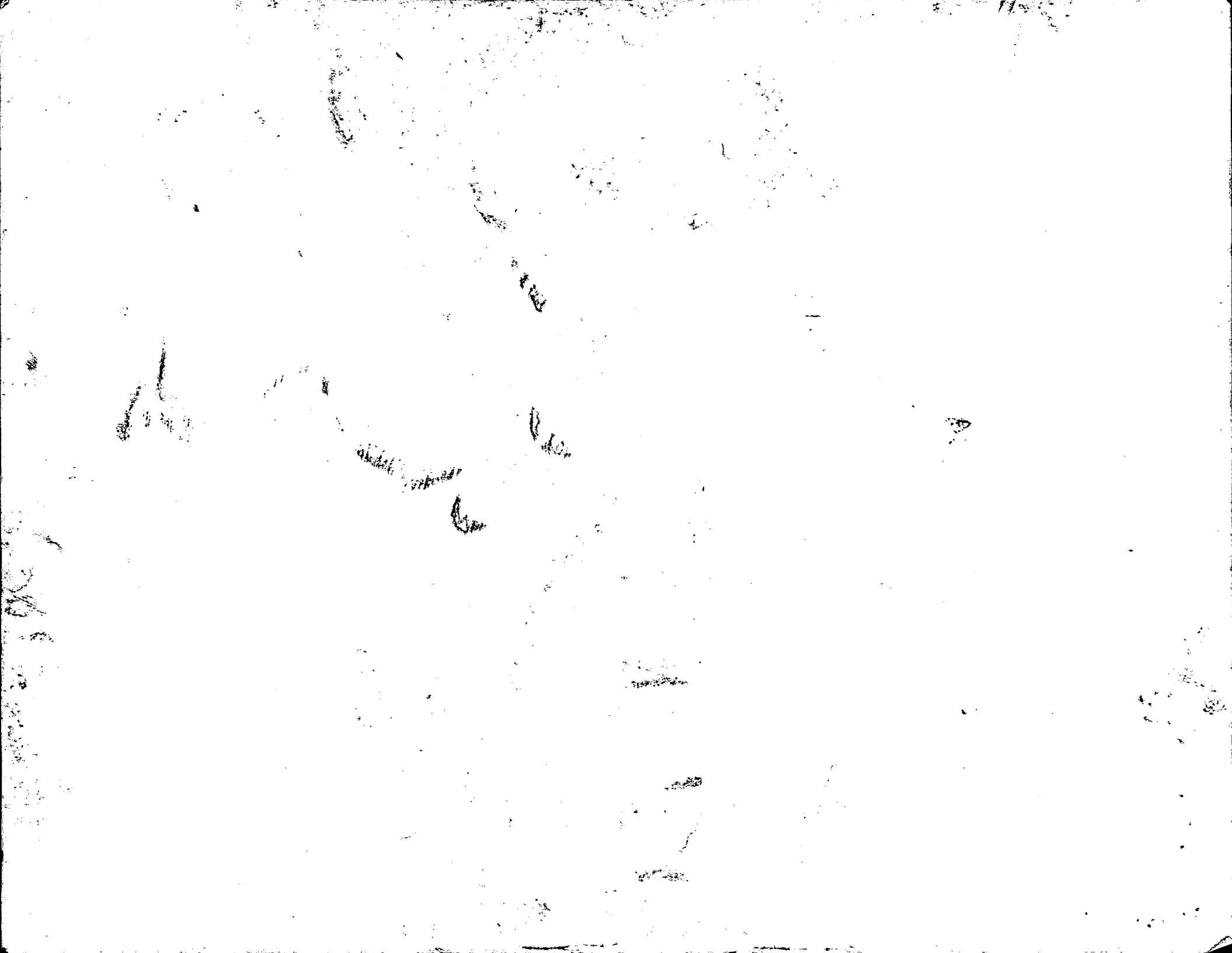
1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH

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CHECKED	#	APPROVED	#	DRAWING NO. D3288
DATE	06.12.19	TITLE	SKIDTUBE ASSEMBLY	REV. C SHEET 3 OF 3 SCALE 1:3



NO. 106

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay Elliott
Joint Welding Procedure Tig
Part number and Job number A206642241/B31880A

TEST WELDS REQUIRED

BASE METAL Alum WELDING PROCESS Tig
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 07/04/27 Qualifier David Amal